



January 2, 2001

2600 Bull Street Columbia, SC 29201-1708

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DEPARTMENT OF THE NAVY SOUTHERN DIVISION NAVAL FEC GABRIEL MAGWOOD 2155 EAGLE DRIVE N. CHARLESTON SC 29406

RE: Zone H, Site 4-Building 640

Charleston Naval Complex Site Identification # 00955

Corrective Action Plan received December 12, 2000

Charleston County

Dear Mr. Magwood:

The Department has completed technical review of the referenced document. As submitted, the Corrective Action Plan (CAP) provides an outline of active corrective action activities designed to remediate hydrocarbon contamination at the referenced facility. The plan acknowledges groundwater contamination is present in excess of established Risk-Based Screening Levels (RBSL).

Groundwater remediation will consist of free product removal. Three options were presented in the CAP, passive removal / skimming, bioremediation and Aggressive Fluid-Vapor Recovery (AFVR). Passive removal / skimming will be implemented first and bioremediation and/or AFVR will only be used if passive efforts are unsuccessful. As bioremediation and AFVR may require additional permits, the Department must be notified prior to implementing these methods. Please give due consideration to the fact that aggressive methods of free product recovery may lead to an increase in dissolved contamination, necessitating a modification to the CAP in order to achieve reasonable cleanup goals. The CAP stated that in addition to a new recovery well (permit enclosed), existing monitoring wells might be used for free product recovery. The Department retains the right to require additional verification wells at the conclusion of corrective action activities to ensure cleanup consistency. Although soil contamination is not present in excess of the established RBSL limits, confirmation sampling of soils may also be required at the conclusion of remediation activities.

The request to initiate corrective action activities as outlined in the reference document is approved for implementation with consideration for the limitations discussed above. The request to implement intrinsic remediation at the conclusion of active remediation activities is denied at this time. If such action is warranted it should be addressed under separate cover at the conclusion of active cleanup activities.

DEPARTMENT OF THE NAVY SOUTHERN DIVISION NAVAL FEC GABRIEL MAGWOOD PAGE 2

Please provide the Department with a schedule for corrective action implementation at this site. Once corrective action is initiated, the Department should receive monitoring reports as described in the CAP.

Should you have any questions please contact me at 803-898-3553 (office phone), 803-898-3795 (fax) or by e-mail <a href="mailto:bishopma@columb32.dhec.state.sc.us">bishopma@columb32.dhec.state.sc.us</a>.

Sincerely,

Michael A. Bishop, Hydrogeologist

Mill A. Box

Groundwater Quality Section

Bureau of Water

Enc: Well Approval

cc: Trident District EQC

Mihir Mehta, SCHDEC-BLWM

Technical File



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Date of Issue: 01/02/2001

Approval No: 983

## **Monitoring Well Installation Approval**

Approval is hereby granted to:

Department of the Navy - CNB

Site ID#:

00955 Charleston

County: Ch

This approval is for the construction of monitoring/recovery wells designated in accordance with the construction plans and technical specifications submitted to the Department in the correspondence dated December 2000 and South Carolina Well Standards and Regulations R.

61-71. The well(s) are to be constructed within the surficial aquifer for the intended purpose of monitoring groundwater quality and/or free product recovery at the referenced facility.

Approval is provided with the following conditions:

1. The surveyed elevations, boring and/or geologist logs and actual (as built) construction details for each well be submitted to the Department with the completed report.

- 2. Well construction and sampling derived waste including, but not necessarily limited to, drill cuttings, drilling fluids, development and purge water should be managed properly and in compliance with applicable requirements. If containerized, each vessel should be clearly labeled with regard to contents, source, and date of activity.
- 3. A minimum of forty-eight (48) hours prior to initiation of drilling activities, please provide notice to the project manager, Michael A. Bishop at (803) 898-3553 or e-mail bishopma@columb32.dhec.state.sc.us.
- 4. Please provide groundwater quality analytical data (chemical analyses and/or water level(s)) and associated measurements (i.e., *in-situ* field measurements) with the completed assessment report.
- 5. All wells shall be installed by a well driller certified by the State of South Carolina.
- 6. Each well shall be labeled with an identification plate constructed of a durable material affixed to the casing or surface pad where it is readily visible. The plate shall provide monitoring well I.D.#, date of construction, static water level, and driller name and state certification number.
- 7. Wells shall be abandoned per R.61-71.10.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Health and Environmental Control Regulations R.61-71.

Approved by:

Michael A. Bishop, Hydrogeologist

**Groundwater Quality Section** 

Bureau of Water